

Drinking Water Advisory Council
Tentative Meeting Agenda
March 14, 2017 1:30 p.m. – 3:30 p.m. ET
300 Sower Boulevard, Training Room C

- Introductions
- Announcements
- Review Agenda
- December 2016 Meeting Minutes
- Chapter 8 Regulation (Tom Gabbard and Carole Catalfo)
 - Sub-metering
 - Other issues to be identified
- Drinking Water Action Plan Update (Tom Gabbard and Jory Becker)
- Sub-groups Report Out Assignments
 - Compliance/Regulations (Kim Padgett)
 - Source Water Protection (Julie Roney)
 - UCMR3 and UCMR4
 - Infrastructure Sustainability (Donna McNeil)
 - Joint Committee with WWAC: Education/Workforce (Paulette Akers)
- Capacity Development Strategy (Russell Neal and Jory Becker)
- Next meeting June 30, 2017, Training Room C

Notes:

- Chapter 8 regulations have been prioritized by the cabinet to file in April. The cabinet intends to resolve the sub-metering issue, and some other issues, among some administrative corrections. The plan will be to share draft
- New Chair for Infrastructure Sustainability – Russell Neal?
- Name change for the Join Committee with WWAC: Education/Workforce

**Drinking Water Advisory Council
Draft Meeting Minutes
December 13, 2016**

In attendance: Paulette Akers (DEP-DCA), Angela Billings (DPH), Rob Campbell (ACEC), Annette DuPont Ewing (KMUA), Mike Gardner (BGMU), David Goodrum (Proxy; KWWOA), Gary Larimore (KRWA), Kim Padgett (RCAP), Roger Recktenwalk (ACO), Kay Sanborn (KYTNAWWA), Rengao Song (LWC), David Spenard (PSC)

Division of Water (DOW): Jory Becker, Rob Blair, Chloe Brantley, Tom Gabbard (Asst. Director), Sarah Gaddis, Peter Goodman (Director), Shawn Hokanson, Samantha Kaiser, Joe Uliasz

Public Attendees: Jeff Cummins (DENF), Ed Fortner (BMU), Greg Heitzman (BWK), Anthony Hollingsworth (RD), Amy Kramer (NKWD), Donna McNeil (KRWA), Vince Monks (LWC), Jason Pennell (PSC), Brian Rice (PSC), Russ Romine (ACEC), Jessica Wilhoite (DCA), Mike West (EEC/OGC)

Introductions

Peter Goodmann welcomed everyone and lead introductions.

Announcements

Samantha Kaiser discussed the new DWAC website (<http://water.ky.gov/DrinkingWater/Pages/dwac.aspx>) where all meeting documents and final meeting minutes will be posted.

Review Agenda

The committee reviewed the agenda. Mr. Goodmann will assign projects to each subcommittee.

September 2016 Meeting Minutes

The committee approved the September 2016 meeting minutes by consensus.

Submetering (Peter Goodmann)

Mr. Goodmann discussed determining whether an apartment complex should be consider a Public Water Supply (PWS) if it submetered units. Utilities currently do not go on the private side of main meters, so there are significant concerns with the unknowns of infrastructure, cross connections, etc. There will be pressure from the administration to make a decision. EPA's policy towards apartments and condos is short and there is no information for connections after the master meter.

The committee discussed the concerns with mobile home parks and agreed that apartment complexes and office structures would be considered different issues than mobile home parks.

WIFA Rules (Kay Sanborn)

The Water Infrastructure Improvements for the Nation (WIIN) Act is scheduled to be signed today. The bill includes the Water Infrastructure Finance and Innovation Act (WIFIA) which includes twenty million dollars to be appropriated for drinking water and wastewater infrastructure projects. Mr. Goodman will distribute a summary of the WIIN Act to the committee once it is signed.

Drinking Water Action Plan (Tom Gabbard and Jory Becker)

Tom Gabbard, Jory Becker, and Commissioner Aaron Keatley have been working together to develop a Drinking Water Action Plan. They are currently identifying data sources and developing an infrastructure matrix. The Plan is expected to be developed by April 30, 2017.

Subgroups Report Out Assignments

Lead in Drinking Water Workgroup (Greg Heitzman)

The Lead in Drinking Water (LIDW) Workgroup is a sub-group of the DWAC with a diverse group of individuals organized into eight subgroups. The LIDW has met several times and discussed public health, regulatory/legislative, treatment/corrosion control, distribution/piping, and will include financing at its next meeting. Kentucky is currently in complete compliance with the Lead and Copper Rule. The LIDW is expected to continue meeting monthly until June 2017, when it will report back to DWAC with a water treatment draft. The hope is to have a high level endorsement from the DWAC group. The LIDW workgroup has been discussing the difference in compliance samples and special samples.

Other states have been sending letters to utilities for inventories of infrastructure. Kentucky has not sent letters, but is expecting pressure from the administration to gather information. The DWAC committee should discuss this at its next meeting.

Mr. Goodman gave a presentation at the Natural Resources Committee on the DWAC and LIDW workgroup. This presentation will be shared with the committee.

Compliance/Regulation (Kim Padgett)

The subcommittee met twice since the last meeting. The subcommittee is working on stage 2 DPBs issues with six-hours training sessions for small systems in March 2017. The training session agenda will include training, distribution, break-out sessions, case studies, and more. Speakers and participants are currently being recruited. The subcommittee needs to submit a request to the DCA for CEUs to be approved.

Sarah Gaddis discussed Consumer Confidence Report (CCR), monitoring, and reporting violations. DOW is working with systems to decrease the number of violations. Once systems receive eleven points they are referred to enforcement. When laboratories have submittal errors they are referred to the Laboratory Certification Section and then receive a Laboratory Accountability letter. The laboratory must submit a corrective action plan (CAP), which outlines why the error occurred and what steps will be taken to prevent this error from happening again. DOW reviews the CAP and approves or denies the response. The laboratory must submit a revised report and then the violation can be rescinded by the rule manager. Shawn Hokanson discussed the changes that will be coming once SDWIS Prime is launched. The systems will know immediately if information is kicked out and will be notified immediately if additional sampling is required. There is currently no date for launch.

Infrastructure Sustainability (Donna McNeil)

The subcommittee added more members, but has not met. The subcommittee should discuss the small systems initiative and how small systems will be sustainable in a modern era, and should define a small system. This subcommittee should have a joint effort with the Wastewater Advisory Council.

Source Water Protection

The subcommittee has not met yet.

Rob Blair discussed DOW's Source Water Protection Program. DOW is evaluating the programs, well heads, and surface waters; identifying partners within the Division and re-establishing partnership with other agencies, and private individuals; and involving and receiving feedback from other programs and the public.

The Ohio River Valley Water Sanitation Commission's (ORSANCO) Source Water Protection is refocusing efforts into a bigger role. The committee would like to discuss the UCMR3 and UCMR4 at the next DWAC meeting. The cost for some contaminants can cost more than \$15,000, which is very expensive for systems that are on the EPA's list with populations greater than 10,000 people as of December 31, 2015. DOW should look into updating systems populations that could have a sustainability problem with this increased cost.

Join Committee with WWAC: Education/Workforce (Paulette Akers)

The Education & Apprenticeship subcommittee met in October. It is developing a brochure on how to recruit new operators. The subcommittee is determining how to educate elected officials on the importance of operator succession planning and recruiting new operators, and discussed developing short training videos/tutorials for operators.

Capacity Development Strategy (Peter Goodman)

DOW is revisiting the Capacity Development Strategy, which is one of the topics that developed the DWAC. Russell Neal and Donna McNeil met to discuss the Capacity Development Strategy. The committee should discuss this at the next DWAC meeting.

Next Meeting March 14, 2017, 1:30 pm to 3:30 pm ET, Training Room C

1 ENERGY AND ENVIRONMENT CABINET

2 Department for Environmental Protection

3 Division of Water

4 (Amendment)

5 401 KAR 8:010. Definitions for 401 KAR Chapter 8.

6 RELATES TO: KRS 223.160-223.220, 224.10-100, 224.10-110, 322, 40 C.F.R. 141.2[,
7 EO 2008-507, 2008-531]

8 STATUTORY AUTHORITY: KRS 223.160-223.220, 224.10-100(28), 224.10-110[, EO
9 2008-507, 2008-531]

10 NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100(28) and 224.10-
11 110(2) require the cabinet to promulgate administrative regulations for the regulation and control
12 of the purification of water for public and semipublic use. [EO 2008-507 and 2008-531, effective
13 June 16, 2008, abolish the Environmental and Public Protection Cabinet and establish the new
14 Energy and Environment Cabinet.] This administrative regulation establishes the definitions for
15 terms used by the cabinet in 401 KAR Chapter 8.

16 Section 1. Definitions. Except as provided in this section, the definitions established in 40
17 C.F.R. 141.2 shall apply. (1) "Board" means the Kentucky Board of Certification of Water
18 Treatment Plant and Water Distribution System Operators as established by KRS 223.170.

19 (2) "Boil water advisory" means a type of consumer advisory that provides notice to the
20 consuming public through radio, television, direct mail, electronic mail, posting, newspaper or

1 other media and that conveys in the quickest and most effective manner possible:

2 (a) Information that water provided by a system may cause adverse human health effects
3 due to possible biological contamination if consumed, unless it is first boiled for three (3)
4 minutes at a rolling boil; and

5 (b) What action the public is advised to take.

6 (3) "Bottled water" means water that is:

7 (a) From an approved bottled water treatment plant;

8 (b) Placed in a sealed container or package; and

9 (c) Offered for human consumption or other consumer uses.

10 (4) "Bottled water system" means a public water system that provides bottled drinking
11 water and includes the sources of water, and treatment, storage, bottling, manufacturing, or
12 distribution facilities. The term excludes:

13 (a) A public water system that provides only a source of water supply for a bottled water
14 system; and

15 (b) An entity providing only transportation, distribution, or sale of bottled water in sealed
16 bottles or other sealed containers.

17 (5) "Bottled water treatment plant" means a facility that provides the product water used
18 for bottled water by processing water from an approved source.

19 (6) "Bypass" means a physical arrangement whereby water may be diverted around a
20 feature of the purification process of a public or semipublic water supply.

21 (7) "Certificate" means a certificate of competency issued by the cabinet stating that the
22 operator has met all requirements for the specified operator classification as established by 401
23 KAR Chapter 8.

(8) "Certified laboratory" means a laboratory for which the physical, instrumental, procedural, and personnel capabilities have been approved by the U.S. Environmental Protection Agency or the cabinet and that is certified for one (1) or more types of the contaminants listed or for one (1) or more of the specific constituents or combinations of constituents listed in 401 KAR Chapter 8.

(9) "Certified operator" means an individual who holds an active certificate.

(10) "Community water system" is defined by 40 C.F.R. 141.2.

(11) "Consumer advisory" means a notice to the consuming public through radio, television, direct mail, electronic mail, posting, newspaper, or other media to convey in the quickest and most effective manner possible:

(a) Information that water provided by a system may cause adverse human health effects if consumed and what action the public is advised to take; or

(b) Other information that the public needs to know about its water.

(12) "Contaminant group" means all of the constituent members that collectively comprise the individual bacteriological, inorganic chemical, organic chemical, radiological, volatile organic chemical, synthetic organic chemical, or secondary contaminant groups regulated by 401 KAR Chapter 8.

(13) "Conventional filtration treatment" means a series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal.

(14) "Cross connection" means a physical connection or arrangement between two (2) otherwise separate systems, one (1) of which contains potable water and the other being either water of unknown or questionable safety, or steam, gas, or chemicals, whereby there may be

1 flow from one (1) system to the other, the direction of flow depending on the pressure
2 differential between the two (2) systems.

3 (15) "Direct responsible charge" means personal, first hand responsibility to conduct or
4 actively oversee and direct procedures and practices necessary to ensure that the drinking water
5 treatment plant or distribution system is operated in accordance with accepted practices and with
6 KRS 223 and 401 KAR Chapters 8 and 11.

7 (17) "Mineral water" means bottled water that contains not less than 250 parts per million
8 total dissolved solids.

9 (18) "NTU" means nephelometric turbidity unit.

10 (19) "Operator" means a person involved in the operation of a drinking water treatment
11 plant or distribution system.

12 (20) "Private water supply" means a residential water supply located on private property
13 for the use of one (1) to three (3) residential households.

14 (21) "Product water" means the water processed by a bottled water treatment plant that is
15 used for bottled drinking water.

16 (22) "Professional engineer" means an engineer who is licensed as a professional
17 engineer in Kentucky, pursuant to KRS Chapter 322.

18 (23) "Secondary contaminant" means a contaminant that does not, in general, have a
19 direct impact on the health of consumers but whose presence in excessive quantities may
20 discourage the utilization of drinking water or discredit the supplier.

21 (24) "Secondary standard" means the maximum contaminant level for a secondary
22 contaminant.

23 (25) "Semipublic water system" means a water system made available for drinking or

1 domestic use that does not qualify as a private or public water system.

2 (26) **"Submetering" means the use of meters by a property owner or operator that**
3 **measure water used by tenants for the purpose of passing costs charged by a public water**
4 **system from the property owner or operator to tenants based on tenants' actual water**
5 **usage.**

6 (27) "Supplier of water" means a person who owns or operates a public water system.

7 (28)[(27)] "Surface water" means water that is open to the atmosphere and subject to
8 surface runoff, or groundwater under the direct influence of surface water.

9 (29)[(28)] "Surface water source" means ponds, reservoirs, streams of all sizes, free-
10 flowing springs, a source of water supply for a public water system that has a free water surface
11 exposed to the atmosphere, or groundwater under the direct influence of surface water.

12 (30)[(29)] "System" means a public water system.

13 (31)[(30)] "Turbidity" means the presence of suspended particulates, including sand, silt,
14 clay, finely divided organic or inorganic matter, plankton or other microscopic organisms, or
15 elements that optically interfere with the clarity of liquid.

16 (32)[(31)] "Water distribution system" means the portion of the public water system in
17 that water is conveyed from the water treatment plant or other supply point to the premises of a
18 consumer, or a system of piping and ancillary equipment which is owned and operated by an
19 established water system independent of the water supply system from which potable water is
20 purchased.

21 (33)[(32)] "Water supply system" means the source of supply and all structures and
22 appurtenances used for the collection, treatment, storage, and distribution of water for a public or
23 semipublic water system.

- 1 (34)~~(33)~~ "Water treatment plant" or "purification plant" means that portion of the water
2 supply system that is designated to alter the physical, chemical, or bacteriological quality of the
3 water prior to entry to the water distribution system.

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1 ENERGY AND ENVIRONMENT CABINET

2 Department for Environmental Protection

3 Division of Water

4 (Amendment)

5 401 KAR 8:020. Public and semipublic water systems; submetering; general provisions.

6 RELATES TO: KRS 211.350-211.392, 223.160-223.220, 224.10-100, 224.10-110,
7 224.16-050, 369, 40 C.F.R. 141, 142.14, 142.15, 142.16, 142.20, 142.21, 142.40-142.65

8 STATUTORY AUTHORITY: KRS 223.200, 224.10-100(28), 224.10-110(2), 40 C.F.R.
9 141.3, 141.31, 141.75, 142.14, 142.15, 142.20, 142.21, 142.40-142.65, 42 U.S.C. 300f-300j-26

10 NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100(28) and 224.10-
11 110(2) authorize the cabinet to promulgate administrative regulations for the regulation and
12 control of the purification of water for public and semipublic use. This administrative regulation
13 establishes the general provisions for regulating public and semipublic water supplies.

14 Section 1. A public or semipublic water system shall be subject to the requirements of
15 401 KAR Chapter 8, except those exempted in 40 C.F.R. 141 and 142[141.3].

16 Section 2. Submetering. (1) A property using submeters as defined by 401 KAR
17 8:010(26) shall not be considered a public water system as defined by 40 C.F.R. 141.2 and,
18 except for this administrative regulation, shall be exempt from the requirements of 401
19 KAR Chapter 8.

20 (2)(a) A property using submeters as defined by 401 KAR 8:010(26) and exempt

1 from the requirements of 401 KAR Chapter 8 shall:

2 1. Receive all of its water from a public water system and shall not change the
3 quality of water provided to customers;

4 2. Be located on property owned by a single person, entity, individual, or a co-op or
5 condominium association of property owners;

6 3. Not be regulated as a water utility by the Kentucky Public Service Commission;
7 and

8 4. Not charge tenants an amount that exceeds tenants' share of the actual amount
9 charged by the public water system to the owner or operator of a property using a
10 submetered system, based on the tenants' actual water usage in proportion to the total
11 amount of water used for the entire submetered property.

12 (b) The owner or operator of a property using a submetered system shall designate a
13 person or organization as the owner or operator of the submetered system and shall
14 provide the name, address, and phone number of the designated owner or operator upon
15 request by the cabinet.

16 (c) The owner or operator of a property using a submetered system shall certify to
17 the cabinet in writing that the:

18 1. Submetered system does not have any cross connections; and

19 2. Applicable provisions of 815 KAR 20:120 have been met.

20 (3) An advisory received by the owner or operator pursuant to Section 3(9) of this
21 administrative regulation shall be disseminated to property tenants in the manner
22 established in Section 3(10) of this administrative regulation.

23 (4) Public notices and consumer confidence reports received by the owner or

1 operator pursuant to 401 KAR 8:075 shall be disseminated to property tenants in the next
2 billing period.

3 Section 3[2]. (1) Public and semipublic water systems. A person shall not operate or
4 commence operation of a public or semipublic water system except in compliance with the
5 provisions of 401 KAR Chapter 8 and 40 C.F.R. 141. A water supply system constructed prior to
6 November 11, 1990 may be continued in use, if the operation, maintenance, bacteriological,
7 chemical, physical, and radiological standards comply with 401 KAR Chapter 8, or the system
8 obtains a variance or exemption from those standards in accordance with 40 C.F.R. 141.

9 (2)(a) A cross-connection shall be prohibited.

10 (b) The use of automatic devices, such as a reduced pressure zone back flow preventer
11 and a vacuum breaker, may be approved to protect public health, in lieu of air gap separation.

12 (c) A combination of air gap separation and an automatic device shall be required if
13 determined by the cabinet to be necessary due to the degree of hazard to public health.

14 (d) Every public water system shall determine if or where a cross-connection exists and
15 shall immediately eliminate it.

16 (3) A bypass shall not be created or maintained without the prior written approval of the
17 cabinet stating the approved circumstances for establishment of a bypass, its design, and the
18 exact conditions for its use.

19 (4) An auxiliary intake shall not be used in direct connection with a public or semipublic
20 water system except with prior written approval from the cabinet stating the emergency
21 condition that necessitates the intake.

22 (5) The plumbing system serving the purification plant and auxiliary facilities shall
23 discharge to a sewer system if available.

(a) If a sewer is not available, the connection shall be made to a sewage disposal facility approved pursuant to KRS Chapter 211.350 through 211.392 or 224.16-050.

(b) There shall not be connections between the sewer system and a filter backwash, filter-to-waste drain, or clearwell overflow line, unless an air gap is provided between the drain and overflow line and the sanitary storm sewer or natural drainage system, so as to preclude the possibility of back-up of sewage or waste into the drain or overflow line.

(6) The owner or operator of a public water system shall operate and maintain the facilities and systems of treatment, intake, and distribution to comply with the provisions of 401 KAR Chapter 8 including ~~[- Operation and maintenance includes]~~ effective performance; preventive maintenance; operator staffing and training pursuant to 401 KAR 8:030, 11:040, and 11:050; establishing representative sample points that comply with the requirements of 401 KAR Chapter 8; and adequate process controls for testing, including quality assurance procedures.

(7) Reports to the cabinet.

(a) The supplier of water shall provide a complete monthly operating report to the cabinet, which shall be received at the Division of Water, 300 Sower Boulevard, Frankfort, Kentucky 40601 not later than ten (10) days after the end of the month for which the report is filed.

1. A completed report shall include:

a. Volume of water treated;

b. Average number of hours per day water is being treated;

c.~~[b]~~. Type and amount of chemicals added;

d.~~[e-]~~ Test results appropriate to be reported by the plant; and

e.~~[d-]~~ The dated original signature, or equivalent, pursuant to KRS Chapter 369, of the

owner or authorized agent.

2. A supplier of water shall submit the reports required by 40 C.F.R. 141.75(b) to the cabinet not later than ten (10) days after the end of each month the public water system serves water to the public.

3. A public water system shall report to the cabinet in accordance with 40 C.F.R. 141.31.

(b) Reports of failure to comply. A public water system shall report to the cabinet within forty-eight (48) hours, by phone or in writing, the failure to comply with a provision of 401 KAR Chapter 8, including the failure to comply with monitoring requirements.

(c) Emergency reports.

1. If a public water system experiences a line break or loss of pressure as established in 401 KAR 8:150, Section 4(2)(e), loss of disinfection, or other event that may result in contamination of the water, the public water system shall immediately report to the cabinet by calling the Division of Water in Frankfort at (502) 564-3410 or the appropriate regional field office of the Division of Water.

2. If a report required by this paragraph is made during other than normal business hours, it shall be made through the twenty-four (24) hour environmental emergency telephone number, (800) 928-2380.

(8) Records to be maintained. An owner or operator of a public water system shall keep the records established in 40 C.F.R. 141.33 on the premises or readily accessible to cabinet staff inspecting the system.

(9) Boil water and consumer advisories.

(a) Boil water advisories.

1. A public water system or semipublic water system shall issue a boil water advisory if

1 the system believes an advisory is warranted.

2 2. The cabinet may direct that a boil water advisory be issued upon:

3 a. The reception of confirmed positive bacteriological results including E. coli or fecal
4 coliform in at least one (1) sample; or

5 b. Other circumstances that warrant an advisory for the protection of public health.

6 3. The cabinet may, if circumstances warrant for the protection of public health, issue a
7 boil water advisory directly, rather than rely on a public or semipublic water system to issue the
8 advisory.

9 4. A boil water advisory shall remain in effect until the cabinet approves the lifting of the
10 advisory based on bacteriological results showing coliform bacteria are not present in the water.

11 (b) Consumer advisory.

12 1. The cabinet may issue a consumer advisory if:

13 a. Conditions within a public water system or semipublic water system indicate a possible
14 adverse health effect from consumption of the water distributed by the system; or

15 b. Other information of interest to the consumer exists.

16 2. The advisory shall notify affected persons of a required or recommended action.

17 (c) A public or semipublic water system shall:

18 1. Immediately notify the local health department that serves the area affected if a boil
19 water advisory or consumer advisory is issued.

20 a. The notification may be made by telephone, email, or fax machine for an occurrence
21 during normal business hours.

22 b. For an occurrence after normal business hours, the public or semipublic water system
23 shall notify the affected local health department in a manner agreed upon by the system and

1 affected health department; or

2 2. Develop a protocol with a local health department that describes when and how the
3 system shall notify the affected health department if the system issues a boil water advisory or
4 consumer advisory. The protocol shall address:

5 a. For which types of advisories the system shall notify the affected health department;

6 b. What procedures shall be used to notify and under what circumstances;

7 c. How soon after the occurrence the notification shall be made; and

8 d. To whom the notification shall be made, during and after business hours.

9 (10) How to issue an advisory.

10 (a) A boil water advisory or consumer advisory shall be issued through newspapers,
11 radio, television, or other media having an immediate public impact.

12 (b) As a health and safety measure, the water system shall repeat the notification during
13 the period of imminent danger at intervals that maintain public awareness.

14 (c)1. The advisory shall be readily understandable and shall include instructions for the
15 public, as well as an explanation of the steps being taken to correct the problem.

16 2. Boiling instructions shall caution to boil water to be used for consumption by boiling
17 the water for at least three (3) minutes at a rolling boil.

18 (11) Maps.

19 (a) A public or semipublic water system shall have on the premises, or readily accessible
20 to cabinet staff inspecting the system, an up-to-date map of the distribution system. The map
21 shall, at a minimum, show:

22 1. Line size;

23 2. Cutoff valves;

3. Fire hydrants;
4. Flush hydrants;
5. Tanks;
6. Booster pumps;
7. Chlorination stations;
8. Connection to emergency or alternative sources;
9. Wholesale customer master meters; and
10. Type of piping material in the distribution system and its location.

(b)1. If a public water system is not able to comply with the requirements of paragraph (a) of this subsection, the system may petition the cabinet to modify this requirement.

2. The petition for modification shall state specifically what portion of the requirements of paragraph (a) of this subsection is not practical and why.

(12) Operation and maintenance manual.

(a) Each public water system shall develop and keep on the premises, for operators and employees of the system, an operation and maintenance manual that includes:

1. A detailed design of the plant;
2. Daily operating procedures;
3. A schedule of testing requirements designating who is responsible for the tests; and
4. Safety procedures for operation of the facility, including storage and inventory requirements for materials and supplies used by the facility; and

5. Procedures for issuing a boiled water advisory and consumer advisory, including notification to the public and local health department and consumers.

(b) The operation and maintenance manual shall be updated as necessary, but not less

1 than annually, and shall be available for inspection by the cabinet.

2 (c) Public water systems serving fewer than 100 people or thirty (30) service connections
3 may request that the cabinet waive the requirements of paragraphs (a) and (b) of this subsection.
4 The request shall be in writing and any waiver granted by the cabinet shall be in writing and be
5 retained by the public water system for examination by cabinet personnel.

6 (13) Flushing recommended.

7 (a) To protect public health, a distribution system may be thoroughly flushed at least
8 twice a year, usually in the spring and fall. The purpose of systematic flushing is to reduce
9 turbidity created from the scouring of accumulated sediment within the water lines.

10 1. Flushing shall start at the hydrants nearest the source of supply and proceed in an
11 outward direction to the end of each main.

12 2. Flushing shall continue at each hydrant until all traces of turbidity and color are gone.

13 3. Hydrants shall be opened and shut slowly to prevent damage from water hammer.

14 (b) In addition to the regularly scheduled flushing, the following conditions shall indicate
15 a need to flush the entire system:

16 1. Turbidity within the distribution system greater than five (5) or one (1) nephelometric
17 turbidity units, or NTU, as applicable to the system;

18 2. An inability to maintain an adequate residual of a disinfection agent in any part of the
19 system; or

20 3. A heterotrophic plate count, or HPC, in excess of 500.

21 (c) Other indicators that flushing may be necessary shall be taste and odor complaints,
22 color of water, contaminated water samples, or line repairs.

23 (14) A person shall not introduce into the water supply system a substance that may have

1 a deleterious physiological effect, or for which physiological effects may not be known.

2 (15) Certified lab analysis required. For the purpose of determining compliance with the
3 sampling requirements of 401 KAR Chapter 8, samples shall be analyzed by a laboratory
4 certified by the cabinet as prescribed in 401 KAR 8:040, except that measurements for turbidity,
5 disinfectant residuals, and other parameters specified by 40 C.F.R. 141.28 and 141.131 may be
6 performed by a certified operator or an individual under the supervision of a certified operator.

7 (16) Right of entry. The cabinet may enter an establishment, facility, or other property of
8 public and semipublic water supplies in order to determine whether the supplies have acted or
9 are acting in compliance with applicable laws or regulations that the cabinet has the authority to
10 enforce.

11 (a) Entry may include collection of water samples for laboratory analyses and inspection
12 of records, files, papers, processes, controls, and facilities required to be kept, installed, or used
13 under the provisions of 401 KAR Chapter 8.

14 (b) The cabinet or its authorized agent may cause to be tested a feature of a public water
15 system, including its raw water source, to determine compliance with applicable legal
16 requirements.

17 (17) Recommended practices for water supply reservoirs to be used for drinking water.
18 The following practices may be employed by water systems that have a lake primarily used as a
19 source of raw drinking water.

20 (a) Prohibition of swimming, water skiing, and other contact sports;

21 (b) Prohibition of large motor-driven craft or any craft with toilets;

22 (c) A requirement that an area at least 100 feet wide from the upper pool elevation be
23 kept clear of all sources of potential contamination such as septic tanks, drain fields, livestock,

1 and barns;

2 (d) Prohibition of effluent from sewage treatment plants being discharged into the lake;

3 (e) Picnicking may be permitted around the lake if plans for the development of a picnic
4 area meet regulatory requirements of the cabinet; and

5 (f) Implementation of a nonpoint source pollution control plan.

6 (18) Water treatment chemicals and system components. Chemical additives and
7 protective materials, such as paints and linings, may be used by a water system if they meet the
8 requirements established in the "Recommended Standards for Water Works", 2012 Edition,
9 A Report of the Water Supply Committee of the Great Lakes-Upper Mississippi River Board
10 of State Public Health and Environmental Managers' Recommended Standards for Water Works.

11 (19) Disposal of chlorinated water. Chlorinated water resulting from disinfection of
12 treatment facilities and new, repaired, or extended distribution systems shall be disposed in a
13 manner that shall not violate 401 KAR 10:031.

14 (20) Water loading stations. A public water system that provides water loading stations
15 for the purpose of providing water to water hauling trucks or other bulk water devices shall
16 construct the stations to conform to the standards in the Great Lakes-Upper Mississippi River
17 Board of State Public Health and Environmental Managers' Recommended Standards for Water
18 Works.

19 Section 4[3]. The cabinet shall maintain records and submit reports as established in 40
20 C.F.R. 142.14, 142.15, and 142.16(f).

21 Section 5[4]. A public water system may receive a variance or exemption from some
22 provisions of 401 KAR Chapter 8 only in accordance with 40 C.F.R. 141.4.

23 Section 6[5]. A public water system may use noncentralized treatment devices only in

1 accordance with 40 C.F.R. 141.100 or bottled water only in accordance with 40 C.F.R.[141,
2 Sections] 141.101.

3 Section 7[6]. Incorporation by Reference. (1) "Recommended Standards for Water
4 Works, 2012 Edition [2003]," A Report of the Water Supply Committee of the Great Lakes-
5 Upper Mississippi River Board of State Public Health and Environmental Managers, is
6 incorporated by reference.

7 (2) This material may be inspected, copied, or obtained, subject to applicable copyright
8 law, at Division of Water, 300 Sower Boulevard, Frankfort, Kentucky 40601, Monday through
9 Friday, 8 a.m. to 4:30 p.m. This material is also available on the division's Web site at
10 <http://water.ky.gov>.

11 (3) This material may also be obtained at
12 <http://10statesstandards.com/waterrev2012.pdf>

1 ENERGY AND ENVIRONMENT CABINET

2 Department for Environmental Protection

3 Division of Water

4 (Amendment)

5 401 KAR 8:040. Laboratory certification.

6 RELATES TO: KRS 224.10-100, 40 C.F.R. 141.21, Appendix A-Subpart C,
7 141.201, Appendices A, B of Subpart Q[, EO 2009-538]

8 STATUTORY AUTHORITY: KRS 224.10-100(4), (5), (28), 224.10-110(2), 40 C.F.R.
9 141.28, 40 C.F.R. 142.10, 42 U.S.C. 300f-300j-26[, EO 2009-538]

10 NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-110(2) requires the
11 cabinet to enforce the administrative regulations promulgated by the secretary for the regulation
12 and control of the purification of water for public and semipublic use.[EO 2009-538, effective
13 June 12, 2009, establishes the new Energy and Environment Cabinet.] This administrative
14 regulation establishes procedures for certification of commercial or water system laboratories to
15 test for drinking water contaminants.

16 Section 1. Laboratory Certification. (1) The U.S. Environmental Protection Agency or the
17 cabinet shall evaluate a public water system laboratory or a commercial laboratory that performs
18 drinking water analysis for a public water system for certification.

19 (2) Contracting by the cabinet with a third party to conduct laboratory evaluations and
20 make recommendations to the cabinet regarding certification shall be in accordance with the
21 Manual for the Certification of Laboratories Analyzing Drinking Water; Criteria and Procedures

1 Quality Assurance; Fifth Edition, January 2005", Publication EPA 815-R-05-004.

2 (3)(a) Certification may be for one (1) or more~~[analysis]~~ categories and include one or
3 more method-analytes within a specific~~[or for a single drinking water contaminant within an~~
4 ~~analysis]~~ category.

5 (b) Each specific method-analyte pair~~[analysis category]~~ shall require a different
6 certification, but an on-site laboratory audit may include all method-analyte pairs for which the
7 laboratory has requested certification~~[qualification for different certifications may be evaluated~~
8 ~~during one (1) audit]~~.

9 Section 2. Application. (1) An initial certification request may be made at any point
10 during the calendar year.

11 (2) A laboratory seeking certification shall submit a written request for certification to the
12 cabinet. The request shall include:

13 (a) A statement of the method analyte pair~~[analysis category]~~ or drinking water
14 contaminant for which certification is requested;

15 (b) A list of the analytic methods for each analysis for which certification is requested;

16 (c) Payment of the fee established in 401 KAR 8:050, Section 2(5) for the certification
17 requested; and

18 (d) Completion of a Proficiency Test (PT)~~[Performance Evaluation (PE)]~~ study for each
19 method-analyte pair~~[analysis category or drinking water contaminant]~~ for which certification is
20 requested.

21 (3) The cabinet may request other information necessary to determine eligibility for
22 certification as described in the Manual for the Certification of Laboratories Analyzing Drinking

1 Water; Criteria and Procedures Quality Assurance; Fifth Edition, January 2005", Publication
2 EPA 815-R-05-004.

3 (4)(a) A laboratory that~~[An applicant who]~~ has been decertified in accordance with the
4 "Manual for the Certification of Laboratories Analyzing Drinking Water; Criteria and
5 Procedures Quality Assurance; Fifth Edition, January 2005", Publication EPA 815-R-05-004
6 for a method analyte pair~~[an analysis category or drinking water contaminant]~~ may request
7 recertification in accordance with this section.

8 (b) The applicant for recertification shall pay the fee established in 401 KAR 8:050,
9 Section 2(4).

10 Section 3. Public Water System Laboratory. (1) A Public water system may establish a
11 laboratory. Each laboratory shall be certified annually.

12 (2) Failure to achieve or maintain annual certification shall not relieve the public water
13 system of the responsibility to report results of the required analyses from a certified laboratory.

14 Section 4. Requirements. Maintenance of certification shall require the following:

15 (1) Analysis. Analyses for drinking water contaminants shall be performed in accordance
16 with the appropriate approved method established in 40 C.F.R. Subpart C, 141.21 through
17 Appendix A;

18 (2) Submission of analysis results. The result of each analysis performed in a certified
19 laboratory by or for a public water system shall be submitted to the cabinet by the tenth day of
20 the month following the compliance period for which the analysis was performed and shall be
21 submitted to the public water system as soon as possible. The public water system shall be
22 responsible for this reporting requirement; and

1 (3) **Proficiency Test**~~[Performance evaluation]~~ sample. A **proficiency test**~~[performance~~
2 ~~evaluation (PE)]~~ sample shall be analyzed for each **method analyte pair**~~[analysis category or~~
3 ~~drinking water contaminant]~~ for which certification is requested, and the results shall be
4 submitted to the cabinet **in accordance with**~~[at times specified in]~~ the "Manual for the
5 Certification of Laboratories Analyzing Drinking Water; Criteria and Procedures Quality
6 Assurance; **Fifth Edition, January 2005**", **Publication EPA 815-R-05-004**~~[not to exceed twice~~
7 ~~a year, unless additional results shall be required in accordance with the Manual for the~~
8 ~~Certification of Laboratories Analyzing Drinking Water; Criteria and Procedures Quality~~
9 ~~Assurance]~~.

10 Section 5. Deviations. (1) Deviation from accepted practice specified in the "Manual for
11 the Certification of Laboratories Analyzing Drinking Water; Criteria and Procedures Quality
12 Assurance; **Fifth Edition, January 2005**", **Publication EPA 815-R-05-004** listed on a report
13 resulting from an on-site inspection, shall be corrected.

14 (2) A written explanation of the deviation and action taken to correct it shall be submitted
15 to the cabinet within thirty (30) days of the issuance of the inspection report.

16 Section 6. Violations. (1) A laboratory shall report any violation of a maximum
17 contaminant level or other violation requiring Tier 1 public notification pursuant to 401 KAR
18 8:070 to the public water system and the cabinet within twenty-four (24) hours of sample
19 analysis, in accordance with 40 C.F.R. 141.201-141.211, Appendices A and B.

20 (2) A public water system shall begin check sampling within twenty-four (24) hours of
21 notification of a violation.

22 (6) Emergency provision. A laboratory shall make provisions to receive and test samples
23 twenty-four (24) hours a day during an emergency.

1 Section 7. Right of Entry. A certified laboratory shall permit the cabinet to conduct on-
2 site surveys during normal business hours, without prior notification.

3 Section 8. Revocation of certification and downgrading of certification shall be in
4 accordance with the procedures established in the "Manual for the Certification of Laboratories
5 Analyzing Drinking Water; Criteria and Procedures Quality Assurance; **Fifth Edition, January**
6 **2005", Publication EPA 815-R-05-004.**

7 (1) A laboratory that has been notified of a change of certification shall, within seventy-
8 two (72) hours, notify the public water systems that the laboratory serves of the change in
9 certification status and any impact that change could have on the public water system.

10 (2) A laboratory may provide monitoring reports by subcontracting with a laboratory that
11 is certified by the cabinet.

12 Section 9. Recognition of an Out-of-state Laboratory. (1) The cabinet shall recognize a
13 laboratory located outside Kentucky upon submission of proof by the laboratory that it is
14 certified by the Environmental Protection Agency, or by a state having primary enforcement
15 responsibility for the provisions of the Safe Drinking Water Act, 42 U.S.C. 300f through 300j-
16 26, or that is certified pursuant to the Safe Drinking Water Act, 42 U.S.C. 300f through 300j-26,
17 requirements.

18 (2) A water system located in Kentucky that has entered into a contract with a certified
19 out-of-state laboratory shall comply with time intervals and capabilities established in the
20 Manual for the Certification of Laboratories Analyzing Drinking Water; Criteria and Procedures
21 Quality Assurance; **Fifth Edition, January 2005, Publication EPA 815-R-05-004.**

22 (3) If on-site inspection shall be conducted for certification of an out-of-state laboratory,
23 the laboratory shall bear the cost.

1 Section 10. Incorporation by Reference. (1) "Manual for the Certification of Laboratories
2 Analyzing Drinking Water; Criteria and Procedures Quality Assurance; Fifth Edition, January
3 2005", Publication EPA 815-R-05-004, is incorporated by reference.

4 (2) This material may be inspected, copied, or obtained, subject to applicable copyright law,
5 at the Kentucky Division of Water, 300 Sower Boulevard, Frankfort, Kentucky 40601, Monday
6 through Friday, 8 a.m. to 4:30 p.m.

DRAFT

1 ENERGY AND ENVIRONMENT CABINET

2 Department for Environmental Protection

3 Division of Water

4 (Amendment)

5 401 KAR 8:075. Consumer confidence reports and public notification.

6 RELATES TO: KRS 224.10-100, 224.10-110, 40 C.F.R. 141.151-141.155, 40 C.F.R.
7 141.201-141.211, Appendix A, Appendix B, Appendix C, 42 U.S.C. 300f-300j-26[, ~~EO 2008-~~
8 ~~507, 2008-531~~]

9 STATUTORY AUTHORITY: KRS 224.10-100(28), 224.10-110, 40 C.F.R. 141.151-
10 141.155, 40 C.F.R. 141.201-141.211, 42 U.S.C. 300f-300j-26[, ~~EO 2008-507, 2008-531~~]

11 NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-110(2) and (3) require the
12 Secretary of the Cabinet to promulgate administrative regulations for the regulation and control
13 of the purification of water for public and semipublic use. [~~EO 2008-507 and 2008-531, effective~~
14 ~~June 16, 2008, abolish the Environmental and Public Protection Cabinet and establish the new~~
15 ~~Energy and Environment Cabinet.~~] This administrative regulation establishes the requirements
16 for consumer confidence reports and notification of the public if a public water system
17 violates a provision of 401 KAR Chapter 8. This administrative regulation establishes
18 requirements different from the federal regulation for submitting consumer confidence reports
19 and certifications to the cabinet in enforceable timeframes. The federal regulation requires
20 consumer confidence reports to be mailed to the cabinet at the same time the report is delivered
21 to the customers, and the certification is required to be submitted to the cabinet within three (3)

1 months. This administrative regulation requires that the consumer confidence report and
2 certification be delivered to the cabinet by July 1 of each year.

3 Section 1. **Consumer confidence reports.** (1) A community water system shall submit
4 an annual consumer confidence report to its customers and to the cabinet in accordance with 40
5 C.F.R. 141 Subpart O, 141.151, 141.152, 141.153, 141.155, including Appendix A, and 141.154,
6 except as provided in subsection (2) of this section.

7 (2) A copy of the annual report and certification required by 40 C.F.R. 141.155 shall be
8 delivered to the cabinet and the system's customers by July 1 each year.

9 **Section 2. Public notification. The owner or operator of a public water system shall**
10 **give public notice as established in 40 C.F.R. Subpart Q, 141.201 through 141.211,**
11 **Appendix A, Appendix B, and Appendix C.**

1 ENERGY AND ENVIRONMENT CABINET

2 Department for Environmental Protection

3 Division of Water

4 (Amendment)

5 401 KAR 8:100. Design, construction and approval of facilities **and approval timetable**
6 **for 401 KAR Chapter 8.**

7 RELATES TO: KRS 151.634, 224.10-110[, ~~224.60-100~~], 322.020(1), 322.340, 40 C.F.R.
8 **141**[~~141.5, 141.110-111~~]

9 STATUTORY AUTHORITY: KRS ~~224.10-100~~[~~224.10-100(2)~~], 224.10-110, **224.10-**
10 **220**, 40 C.F.R. 141.5[, ~~141.110-111~~], **142.10, 142.16**, 42 U.S.C. 300j-26

11 NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-110 (2), (3), and (4)
12 require the cabinet to enforce administrative regulations promulgated by the secretary for the
13 regulation and control, including construction and operation **of facilities**, of the purification of
14 water for public and semipublic use. **KRS 224.10-220 requires the cabinet to prescribe**
15 **timetables for the issuance of all permits by the cabinet, except those permits for which a**
16 **timetable is set out by statute.** This administrative regulation establishes design plan
17 requirements for the construction of new and expanded facilities that deliver potable water for
18 public or semipublic use and establishes requirements for submitting plans and specifications for
19 modifications to existing facilities **and a timeline for cabinet review and approval or**
20 **disapproval of plans.** There is not a federal regulation that deals with this subject matter;

1 therefore, this administrative regulation is not more stringent than federal requirements.

2 Section 1. Preliminary Engineering Report. (1) A preliminary engineering report for a
3 proposed new facility or a modification to an existing facility shall be prepared by a professional
4 engineer and submitted to the cabinet.

5 (a) Except as established in paragraph (b) of this subsection, a supplier or potential
6 supplier of water shall submit the preliminary engineering report to the cabinet before entering
7 into a financial commitment for or initiating construction of a new public water system or
8 increasing the capacity of an existing public water system.

9 (b) A preliminary engineering report shall not be required for:

10 1. A semipublic treatment facility; or

11 2. Construction, extension, or improvement of a distribution system.

12 (c) The preliminary engineering report shall comply with 40 C.F.R. 141.5, Siting
13 requirements.

14 (2) The preliminary engineering report shall include[the following information]:

15 (a) The name of the applicant and of the owner of the plant;

16 (b) A map that shows the location of the proposed facility;

17 (c) The proposed source of water and the quantity available, with the location of the
18 intake or wellhead identified by latitude and longitude in degrees, minutes, and seconds;

19 (d) An analysis of the water from the proposed source for contaminants regulated
20 pursuant to 401 KAR Chapter 8, performed by a certified laboratory;

21 (e) A detailed description of the proposed facility;

22 (f) A detailed flow diagram of the proposed facility;

23 (g) A demonstration that the intake or intakes comply with "Water Policy

Memorandum number 84-02, General Guidelines for Conducting Stream Studies for Wastewater Discharges Proposed within Five Miles Upstream from Public Water Supply Sources, or for the Location of Public Water Supply Intakes within Five Miles Downstream from Wastewater Discharges", 1984;

(h)[(g)] Pilot study conclusions, if conducted; and

(i)[(h)] An operation plan, including:

1. Anticipated load;
2. Hours of operation;
3. Area served; and
4. Number and certification of operational staff.

(3) Preliminary engineering report approval.

(a) The preliminary engineering report shall be consistent with the requirements of the materials incorporated by reference in Section **9(a) through (c)[(a) — (e)]** of this administrative regulation.

(b) Upon receipt and review of the preliminary engineering report, the cabinet shall either approve the preliminary engineering report or return it to the applicant for revision.

1. Final plans shall not be submitted until the preliminary engineering report has been approved.

2. Approval of the preliminary engineering report shall not constitute final approval for construction.

3. A proposed change in the preliminary engineering report shall be submitted to the cabinet and approved prior to incorporation in the final plans.

Section 2. Final Plans and Specifications. (1) Final plans and specifications for the

1 construction or modification of a water treatment plant or a distribution facility shall be
2 consistent with the materials incorporated by reference in Section 9(a) through (c)[(a) — (e)] of
3 this administrative regulation.

4 (a) If a preliminary engineering report is required pursuant to Section 1 of this
5 administrative regulation, the final plans and specifications shall be consistent with the approved
6 preliminary engineering report.

7 (b)1. Plans for the construction or modification of a public water system shall be
8 submitted by the water system or shall be accompanied by a letter from the water system
9 confirming that the water system has reviewed the plans, accepts the design, and has the capacity
10 to and shall provide water service to the project.

11 2. A public water system that purchases water from another public water system shall
12 submit a letter from the providing water system verifying the providing water system has the
13 capacity and shall provide water service to the purchasing water system, including the proposed
14 project if the project will result in:

15 a. Demand for water exceeding eighty-five (85) percent of the purchasers current
16 purchase contract; or

17 b. Increased water demand by the purchaser by 10,000 gallons or more per day.

18 (c) Engineering plans and specifications shall:

19 1. Be submitted to the cabinet;[~~shall~~]

20 2. Be prepared by a professional engineer licensed in Kentucky;[,] and[~~shall~~]

21 3. Bear the engineer's seal, signature, and date of signature.

22 4. [1-]Prior to the construction or modification of a public or semipublic water system,
23 the following documents and fees shall be submitted to the cabinet:

1 a. Two (2)[Three (3)] copies, one of which shall be in an electronic format approved
2 by the cabinet, of the plans and specifications or changes thereto;

3 b. For construction or modification of a distribution system, a complete Construction
4 Application for Drinking Water Distribution, DW-1, 8/2010 form;

5 c. For the construction or modification of a treatment facility, a completed Construction
6 Application for Drinking Water Treatment, DW-2, 8/2010 form;

7 d. For construction or modification of a semi-public facility, a completed Construction
8 Application for Small Groundwater and Semi-Public Systems, DW-3, 8/2010 form;

9 e. A map that shows the location of the proposed facility;

10 f. Hydraulic calculations;

11 g. Design data and supporting documents necessary for review of the plans and
12 specifications;

13 h. Chemical and microbiological analyses of a new raw water source if the plans and
14 specifications are for a treatment facility; and

15 i. The fee required by 401 KAR 8:050.

16 2. Construction or modification of a public or semipublic water system shall not begin
17 until the plans and specifications have been approved by the cabinet in writing.

18 3. The front page of the plans shall identify the:

19 a. Public water system;[, the]

20 b. Owner of the public water system;[, the]

21 c. Public water system's location by city and county;[,] and[the]

22 d. Professional engineer preparing the plans.

23 (d) The cabinet's review of plans and specifications shall be limited to sanitary features of

1 design and other features of public health significance and shall not include a review of
2 structural, mechanical, or electrical design.

3 (e) The plans shall be drawn to scale and shall be accompanied by specifications, so as to
4 allow a comprehensive engineering review, and shall include the following:

5 1. Plan and sectional views with all necessary dimensions; and

6 2. A piping diagram in sufficient detail to allow a hydraulic analysis of the system.

7 (2) Approval of final plans.

8 (a) Upon receipt and review of final plans and specifications, the cabinet shall either
9 approve the final plans and specifications in writing or return them to the applicant for revision.

10 (b) If approved, one (1) set of approved plans and specifications shall be returned to the
11 engineer, and one (1) set shall be returned to the water system.

12 Section 3. Construction. (1)(a) During construction, a set of approved plans and
13 specifications shall be available at the job site.

14 (b) Construction shall be performed in accordance with the approved plans and
15 specifications.

16 (2) If the cabinet's representative observes work being performed in a manner that does
17 not conform to the approved plans and specifications, the cabinet shall notify the owner in
18 writing.

19 (3) Unless construction begins within two (2) years from the date of approval of the final
20 plans and specifications, the approval shall expire.

21 Section 4. Final approval of facility. (1) Upon completion of construction, a professional
22 engineer shall certify in writing that the project has been completed in accordance with the
23 approved plans and specifications.

(2) A proposed change to the approved plans affecting sanitary features of design shall be submitted to the cabinet for approval in accordance with Section 2 of this administrative regulation.

(3) The public water system shall not implement a change to the approved plans without the prior written approval of the cabinet.

Section 5. Modifications and extension of service. The cabinet shall not approve a modification of a public water system or an extension of service to one (1) or more customers if the modification or extension of service is likely to result in the water system's inability to supply consistent water service in compliance with 401 KAR 8:010 through ~~8:510~~~~[8:600]~~.

Section 6. Treatment Techniques. A public water system shall comply with the treatment technique requirements established in 40 C.F.R. ~~141.110~~~~[141.10]~~ through 141.111, General requirements and treatment techniques for acrylamide and epichlorohydrin.

Section 7. Variance. If plans and specifications deviate from the requirements of this administrative regulation, a written request for a variance shall be submitted with the plans and specifications or preliminary plans.

(1) The variance request shall include:

(a) ~~A~~~~[a]~~ description of the reason for the variance request;

(b) The basis for the alternate plans or specifications, which shall be supported by current engineering practices; and

(c) Other information necessary to support the variance.~~[;]~~

(2) A variance shall not be approved if it will not protect public health, water quality, and the environment.

Section 8. Approval Timetables. (1) The cabinet shall issue its final decision on a

1 request for a preliminary or final approval of plans and specification reviews within forty-
2 five (45) calendar days of receipt of the complete request for approval. A complete request
3 for approval shall contain all the administrative and technical information required by
4 applicable statutes and administrative regulations.

5 (2) Timetable Extensions.

6 (a) If two (2) or more permits for a facility, site, source, construction project, or other
7 entity are required from the cabinet, the cabinet may coordinate the issuance of the permits,
8 establishing different review and action times that shall be accomplished by the cabinet or
9 applicant.

10 (b) If the permits are coordinated, the cabinet shall so notify the applicant and
11 indicate the time frames under which the intermediate and final permit actions shall be
12 accomplished.

13 (c) The established time frame for final action shall not exceed the last date for action
14 that is provided for under applicable statutes and administrative regulations, based on all
15 applications being considered and their filing dates.

16 (3) The applicant and the cabinet may agree that the timetables or review times
17 specified in this administration regulation may be extended.

18 (4) For applications for approvals submitted to the division prior to the effective date
19 of this administrative regulation, the review times shall be applied as if the application were
20 received on the effective date of this administrative regulation.

21 Section 9[8]. Incorporation by Reference. (1) The following material is incorporated by
22 reference:

23 (a) "Recommended Standards for Water Works, 2012 Edition, A Report of the

1 Water Supply Committee of the Great Lakes-Upper Mississippi River Board of State
2 Public Health and Environmental Managers”[Great Lakes—Upper Mississippi River Board of
3 State and Provincial Public Health and Environmental Managers “Recommended Standards for
4 Water Works”, 2007];

5 (b) "General Design Criteria for Surface and Ground Water Supplies", April 2010;

6 (c) "Water Policy Memorandum number 84-02, General Guidelines for Conducting
7 Stream Studies for Wastewater Discharges Proposed within Five Miles Upstream from Public
8 Water Supply Sources, or for the Location of Public Water Supply Intakes within Five Miles
9 Downstream from Wastewater Discharges", 1984;

10 (d) "Construction Application for Drinking Water Distribution", DW-1, 8/2010;

11 (e) "Construction Application for Drinking Water Treatment", DW-2, 8/2010; and

12 (f) "Construction Application for Small Groundwater and Semi-Public Systems", DW-3,
13 8/2010.

14 (2) This material may be inspected, copied, or obtained, subject to applicable copyright
15 law, at the Division of Water, 300 Sower Boulevard, Frankfort, Kentucky 40601, Monday
16 through Friday, 8 a.m. to 4:30 p.m.

17 (3) “Recommended Standards for Water Works, 2012 Edition, A Report of the
18 Water Supply Committee of the Great Lakes-Upper Mississippi River Board of State
19 Public Health and Environmental Managers” may also be obtained at
20 <http://10statesstandards.com/waterrev2012.pdf>.

1 ENERGY AND ENVIRONMENT CABINET

2 Department for Environmental Protection

3 Division of Water

4 (Amendment)

5 401 KAR 8:250. Inorganic and organic chemical sampling, analytical techniques,~~[and]~~
6 maximum contaminant levels, radionuclides, and secondary standards.

7 RELATES TO: KRS 224.10-100, 224.10-110, 40 C.F.R. 141, 142, 143~~[141.11, 141.23,~~
8 ~~141.24, 141.40, 141.41, 141.50, 141.51, 141.61, 141.62, EO 2009-538]~~

9 STATUTORY AUTHORITY: KRS 224.10-100(28), 224.10-110(2), 40 C.F.R. 141, 142,
10 143~~[141.11, 141.23, 141.24, 141.40, 141.41, 141.50, 141.51, 141.61, 141.62], 42 U.S.C. 300f-~~
11 ~~300j-26[, EO 2009-538]~~

12 NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-110(2) requires the
13 cabinet to enforce administrative regulations promulgated by the secretary for the regulation and
14 control of the purification of water for public and semipublic use.~~[EO 2009-538, effective June~~
15 ~~12, 2009, establishes 2 the new Energy and Environment Cabinet.]~~ This administrative
16 regulation establishes sampling and analytical requirements for certain inorganic and organic
17 chemicals and sets maximum contaminant levels for those chemicals which, if exceeded, may
18 affect public health. This administrative regulation establishes the requirements for
19 sampling and testing procedures for radionuclides and establishes maximum contaminant
20 levels for safe drinking water. This administrative regulation establishes maximum
21 contaminant levels and requirements for the sampling and testing for contaminants that do

1 not have a direct impact on the health of consumers, but my discourage the utilization of
2 drinking water or discredit the supplier. Provisions for these contaminants are referred to
3 as “secondary standards”. This administrative regulation establishes sampling schedules
4 and requires public water systems to modify treatment to comply with maximum levels
5 established by the federal regulation. Federal regulations leave monitoring frequency and
6 consequences for exceeding secondary standards to primacy agency discretion.

7 Section 1. Inorganic and organic chemical sampling, analytical techniques, and
8 maximum contaminant levels. (1) A public water system shall meet the requirements for
9 inorganic chemicals as established in [~~accordance with~~]40 C.F.R. 141.11, 141.23, 141.41,
10 141.51, and 141.62.

11 (2)[Section 2-] A public water system shall meet the requirements for organic chemicals
12 as established in[~~accordance with~~] 40 C.F.R. 141.24, 141.50, and 141.61.

13 Section 2. Radionuclides. A community water system shall meet the requirements
14 for radionuclides as established in 40 C.F.R. 141.25, 141.26, 141.55, and 141.66.

15 Section 3. Sampling, Analysis, Reporting, and Treatment for Secondary
16 Contaminants. (1) A public water system that treats groundwater or surface water shall
17 sample for secondary contaminants as established in 40 C.F.R. 143.1 through 143.4, with
18 the following additions:

19 (a) An analysis for secondary contaminants shall be performed if a new source of
20 water supply is proposed to the cabinet for preliminary approval pursuant to 401 KAR
21 8:100, Section 1. Excessive amounts of these contaminants or excessive costs for their
22 removal shall be grounds for rejection of the proposed source of water;

1 **(b) An existing public water system that treats groundwater or surface water shall**
2 **sample for, analyze, and report the secondary contaminants listed in 40 C.F.R. 143.3**
3 **annually, and if consumer complaints indicate the presence of one (1) or more of these**
4 **contaminants. Treatment shall be adequate to assure that the secondary contaminant level**
5 **does not exceed the maximum level limits established in 40 C.F.R. 143.3; and**

6 **(c) A sample shall be taken from each entry point to the distribution system.**

7 **(2) If a secondary maximum contaminant level established in 40 C.F.R. 143.3 is**
8 **exceeded by a supplier of water, the cabinet may direct that supplier to modify the**
9 **treatment procedure or to locate a more suitable source of water if the exceeded**
10 **contaminant level results in a violation of the primary drinking water standards or in**
11 **consumer complaints.**

1 ENERGY AND ENVIRONMENT CABINET

2 Department for Environmental Protection

3 Division of Water

4 (Repealer)

5 401 KAR 8:XXX. Repeal of 401 KAR 8:070, 401 KAR 8:101, 401 KAR 8:550, and 401
6 KAR 8:600.

7 RELATES TO: KRS 224.10-100, 224.10-110

8 STATUTORY AUTHORITY: KRS 224.10-100(28), 224.10-110(2)

9 NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.10-100(28) and 224.10-
10 110(2) authorize the Secretary of the Cabinet to promulgate administrative regulations for the
11 regulation and control of the purification of water for public and semipublic use. The language
12 from the administrative regulations being repealed is being consolidated with other regulations in
13 401 KAR Chapter 8. The administrative regulations are necessary pursuant to the Safe Drinking
14 Water Act and to maintain primary authority over state implementation and enforcement of
15 drinking water regulations. There is no federal mandate for the repeal.

16 Section 1. The following administrative regulations are hereby repealed:

- 17 (1) 401 KAR 8:070, Public notification;
18 (2) 401 KAR 8:101, Approval Timetable for 401 KAR Chapter 8;
19 (3) 401 KAR 8:550, Radionuclides; and
20 (4) 401 KAR 8:600, Secondary standards.

EEC – DEP - DOW
Administrative Regulation Briefing Sheet
401 KAR Chapter 8 – Public Water Supply
Proposed regulatory amendments
March 2017

The Division of Water (“the Division”) proposes amendments to fifteen administrative regulations in 401 KAR Chapter 8 – Public Water Supply.

- **401 KAR 8:010** - Definitions
- **401 KAR 8:020** – Public and semipublic water systems; general provisions
- **401 KAR 8:022** - Sanitary surveys
- **401 KAR 8:030** – Water treatment plant and water distribution systems
- **401 KAR 8:040** – Laboratory certification
- **401 KAR 8:050** – Drinking water program fees
- **401 KAR 8:070** – Public notification
- **401 KAR 8:075** – Consumer confidence reports
- **401 KAR 8:100** – Design, construction, and approval of facilities
- **401 KAR 8:101** – Approval timetable for 401 KAR Chapter 8
- **401 KAR 8:150** – Disinfection, filtration, and recycling
- **401 KAR 8:250** – Inorganic and organic chemical sampling, analytical techniques, and maximum contaminant levels
- **401 KAR 8:510** – Disinfectant residuals, disinfection by-products, and disinfection by-product precursors
- **401 KAR 8:550** – Radionuclides
- **401 KAR 8:600** – Secondary standards

The Division of Water has delegated authority for the implementation and enforcement of 40 CFR Parts 141 and 142 via the regulations in 401 KAR Chapter 8. *Any changes to the regulations in 401 KAR Chapter 8 will be subject to approval by the US EPA.*

Background

401 KAR 8:010 establishes definitions for 401 KAR Chapter 8. The proposed amendments will remove an outdated Executive Order, and add a definition for submetering. The regulation was last amended in 2009.

401 KAR 8:020 establishes the regulation and control of water purification for public and semipublic use. The proposed amendments will correct references to 40 CFR 141 and 142, update notification methods to include electronic reporting, add duration of treatment with type and amount of chemicals added, make advisory language consistent throughout the Chapter, add advisory issuance to operations plans, establish minimal reporting requirements so that the waiver requirement can be stricken, and update Materials Incorporated by Reference (MIRs) to their current versions. The regulation will also add an exemption for submetering if the system meets certain requirements. This regulation was last amended in 2010.

401 KAR 8:022 establishes the requirements for conducting sanitary surveys for regulated water systems. The only proposed amendment will remove an outdated Executive Order. This

regulation was last amended in 2009. ***This technical amendment can be accomplished with a letter to the LRC.**

401 KAR 8:030 establishes standards for the staffing and classification of water treatment plants and distribution systems. The proposed amendments will remove an outdated Executive Order. This regulation was last amended in 2010. ***This technical amendment can be accomplished with a letter to the LRC.**

401 KAR 8:040 establishes procedures for certification of commercial or water system laboratories to test for drinking water contaminants. The proposed amendments will remove an outdated Executive Order, change "Performance Evaluation" to "Proficiency Test", and change "analysis category" to "method analyte pair". These changes will clarify testing requirements and align them with current practice. This regulation was last amended in 2010.

401 KAR 8:050 establishes drinking water program fees. The only proposed amendment will remove an outdated Executive Order. This regulation was last amended in 2009. ***This technical amendment can be accomplished with a letter to the LRC.**

401 KAR 8:070 establishes requirements for public notification if a public water system violates a provision of 401 KAR Chapter 8 by referring to one C.F.R. The Division proposes **REPEALING** this regulation and combining the language into 401 KAR 8:075 (below). This regulation was last amended in 2010.

401 KAR 8:075 establishes the requirements for consumer confidence reports and when they must be submitted to the Cabinet. The Division proposes removing an outdated Executive Order, renaming the regulation "Consumer confidence reports and public notification", and adding the language from 401 KAR 8:070 above. This regulation was last amended in 2009.

401 KAR 8:100 establishes design plan requirements for construction and modification of facilities that deliver potable water for public or semipublic use. The Division proposes changing the name of the regulation to "Design, construction, and approval of facilities and approval timetable for 401 KAR Chapter 8" and combining the language from 401 KAR 8:101 (below) into this regulation. The regulation needs technical amendments to correct several CFR citations and remove a Kentucky regulation that no longer exists. The Division also proposes amendments to reduce the number of plans to be submitted and one of them in electronic format, clarify conditions (notification process, treatment procedures), update MIRs, and *potentially* update the 5-Mile Policy (riverbank filtration/groundwater with separate set of requirements, or remove policy application to groundwater; develop measurement standards or variance procedure). This regulation was last amended in 2011.

401 KAR 8:101 – establishes approval timetables for 401 KAR Chapter 8. The Division proposes **REPEALING** this regulation and combining it with 401 KAR 8:100 (above). This regulation was last amended in 2007.

401 KAR 8:150 – this regulation establishes requirements for the disinfection, filtration, recycling, and testing of drinking water in public or semipublic water systems that use surface water or groundwater that is not under the direct influence of surface water. The only proposed amendment will remove an outdated Executive Order. This regulation was last amended in 2010. ***This technical amendment can be accomplished with a letter to the LRC.**

401 KAR 8:250 establishes requirements for inorganic and organic chemical sampling, analytical techniques, and maximum contaminant levels. The Division proposes renaming this regulation "Inorganic and organic chemical sampling, analytical techniques, maximum contaminant levels, radionuclides, and secondary standards" and combining the language from 401 KAR 8:550 and 8:600 (below) into this regulation. This regulation also needs a technical amendment to remove an outdated Executive Order. This regulation was last amended in 2010.

401 KAR 8:510 establishes requirements for disinfectant residuals, disinfection byproducts, and disinfection byproduct precursors. The only proposed amendments are technical and would remove an outdated Executive Order. This regulation was last amended in 2010. ***These technical amendments can be accomplished with a letter to the LRC.**

401 KAR 8:550 establishes the requirements for sampling and testing for radionuclides and establishes maximum contaminant levels for safe drinking water. The Division proposes **REPEALING** this regulation and combining its language into 401 KAR 8:250 (above). This regulation was last amended in 2010.

401 KAR 8:600 establishes "secondary standards" or maximum contaminant levels and sampling/testing and treatment requirements for contaminants that do not have a direct impact on the health of consumers, but may discourage the utilization of drinking water or discredit the supplier. The Division proposes **REPEALING** this regulation and combining its language into 401 KAR 8:250 (above). This regulation was last amended in 2009.

Necessity

The majority of these regulations are required for Kentucky to maintain primacy over its Safe Drinking Water program. All of the regulations will remain consistent with 40 CFR Parts 141 and 142, and will not be more stringent than the federal regulations. The Division will also retain its flexibility in addressing public and semipublic water supply issues where federal regulations allow. Technical amendments to four regulations will remove outdated references to an Executive Order, correct inaccurate citations to federal and Kentucky administrative regulations, and can be accomplished by a letter to the LRC without the necessity of going through the KRS 13A process. The repeal of four regulations and reincorporating their language into existing regulations will reduce the number of regulations in this Chapter from 18 to 14. Since the amendments will not change substantive standards, but will align several processes with current practice, update materials incorporated by reference, and establish electronic processes, there should be no additional costs for the Division or associated with compliance for the regulated community.

DRINKING WATER ADVISORY COUNCIL

March 14, 2017

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